

REMARKS

Claims 1-29 are pending. Reconsideration and allowance based on the below comments are respectfully requested.

The Office Action objects to the drawings due to poor quality. Applicants hereby submit formal drawings to address these concerns. Accordingly, withdrawal of the objection is respectfully requested.

The Office Action rejects claims 1-3, 5, 8-12, 14, 17-19, 21, 24-27 under 35 U.S.C. §103(a) as being unpatentable over Merli, et al. (U.S. patent No. 6,088,141) in view of Fee, et al. (U.S. Patent No. 5,914,794); claims 4, 6, 13, 15, 20, 22 and 28 under 35 U.S.C. §103(a) as being unpatentable over Merli in view of Fee and Tada (U.S. Patent No. 5,532,862) and claims 7, 16, 23 and 29 under 35 U.S.C. §103(a) as being unpatentable over Merli and Fee in view of Cohen, et al. (U.S. Patent No. 4,736,359). These rejections are respectfully traversed.

The Office Action alleges that Merli discloses applicant's claimed amplifier node except for the amplifier node being coupled between a first and second node of which the Examiner asserts is obvious. Further, the Examiner states that Merli fails to teach or disclose the forwarding of fault information directly to a second node by the amplifier node for which the Examiner alleges Fee in combination with Merli provides. Applicants respectfully disagree.

Merli discloses a system which is designed to operate in conjunction with a network manager. The network management system 116 is connected to each of the nodes. Within each node two fault monitors are provided to detect any fault

that comes into the node or occurs within the node. The detection of the fault is communicated to a local control unit 255 that communicates information to the network management system. See column 4, lines 34 through 53 and column 6, lines 12-27.

The node of Merli also includes amplifiers 260 and 262. These amplifiers are internally contained within the node and provide amplification. The Office Action asserts that these amplifiers constitute the claimed amplifier node and would be obvious to remove them from within the nodes of Merli and position them between nodes as claimed in the present invention. First, the amplifiers of Merli are used for amplification and not detection of faults. Merli provides fault monitors to detect faults. Second, the removal of the amplifier from within the node as suggested by the Examiner changes the entire configuration of the node and ability of the node to operate properly. One of ordinary skill would not place the amplifiers of Merli between the first and second node as this would only lead to amplification of every signal sent between the first and second nodes since the amplifier is within Merli function to provide amplification and not detection of fault in communications between nodes.

Applicants also note that the present invention, as discussed in the background section, has been designed to eliminate the need for any type of network management system in which detected faults are communicated to. By eliminating the network management system, the detected fault in the present invention is communicated more efficiently in a direct communication between

nodes using the node amplifier. Thus, not only does Merli fail to teach the claimed amplifier node, Merli, in fact, teaches away from the features of the present invention by the utilization of a network management system. Further, one of ordinary skill in the art would not use the teachings of Merli to suggest coupling an amplifier node between the first and second node.

Also, Fee teaches a system that utilizes line supervisory modules that detect faults on an optical. The line supervisory module send a fault to an element manager. The element manager then formulates an appropriate message identifying the type and location of the fault and sends this information to all line supervisory modules. See column 4, lines 42-49. In another embodiment of Fee, a fault detection module 55 detects faults and reports these to an element manager which then transmits this message to the line supervisory modules. See column 5, lines 9-30.

In the system of Fee, the fault detected is transmitted from the element manager to each of the plurality of line supervisory modules. The communication of a fault information is not transmitted across supervisory channels, as suggested in the Office Action. Further, Fee fails to teach or suggest the use of an amplifier node coupled between a first and second node that detects and receives fault information and transmits this information to the second node. To the contrary, Fee uses an element manager to transfer the fault information to each of the line supervisory modules.

The combination of Merli and Fee fail to teach or suggest the features of the independent claims 1, 10, 17 and 26 as currently recited. Further, Tada and Cohen fail to make up for the deficiencies of Merli and Fee. Accordingly, reconsideration and withdrawal of the rejections are respectfully requested.

Conclusion

For at least these reasons, it is respectfully submitted that claims 1-29 are distinguishable over the cited patents. Favorable consideration and prompt allowance are earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Chad J. Billings (Reg. No. 48,917) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Appl. No. 10/045,587

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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